

REMARKS

The above amendments and the following remarks are fully and completely responsive to the Office Action dated December 16, 2005. The Applicant respectfully requests reconsideration and withdrawal of the rejections based on the foregoing amendments and the following remarks.

By the foregoing amendment, claims 18-20 have been canceled. Thus, claims 11, 12, and 15-17 are currently pending in the application and subject to examination.

Entry of this Amendment is proper under 37 C.F.R. §1.116 since this amendment: (a) places the application in condition for allowance for reasons discussed herein; (b) does not raise any new issue regarding further search and/or consideration since the amendment amplifies issues previously discussed throughout prosecution; (c) does not present any additional claims without canceling a corresponding number of finally-rejected claims; and (d) places the application in better form for appeal, should an appeal be necessary. Applicants thus respectfully request entry of this amendment.

Restriction Requirement

As a preliminary matter, the Applicant notes that the Examiner has taken the position that new claims 18-20 are subject to a restriction requirement, and that claims 11, 12, and 15-17 have been constructively elected by original presentation for prosecution on the merits. Without making an admission on the propriety of the restriction requirement, the Applicant has canceled non-elected claims 18-20 in order to expedite prosecution. The Applicant reserves all rights in the non-elected claims, including the right to file one or more divisional applications directed to the non-elected subject matter.

Rejection Under 35 U.S.C. § 103(a)

Claims 11, 12, and 15-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Akihiro, and further in view of Hamabe et al. (U.S. Patent No. 6,731,949, hereinafter "Hamabe") and Wong et al. (U.S. Patent No. 6,232,466, hereinafter "Wong"). The Applicant respectfully traverses the rejection.

Claim 15 recites in part:

...a judging unit for judging, when the control signal is to be transmitted to the specific mobile station, whether both of the following conditions are satisfied: (a) a difference between received reference signals in an immediately preceding reception from a mobile station is equal to or larger than a threshold value, and (b) a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length; and

a controlling unit for forcing, when the judging unit judges both conditions are satisfied, the wireless base station to stop forming the array antenna pattern and to transmit the control signal by forming an omnidirectional antenna pattern, and for controlling the wireless base station so that a transmission power is lowered temporarily.

The Applicant respectfully submits that the cited prior art fails to disclose or suggest all the elements of claim 15. Specifically, the cited prior art fails to disclose or suggest "judging whether... a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length."

The Office Action admits that Akihiro and Hamabe fail to teach at least "judging whether... a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length." The Office Action cites Wong as curing this deficiency, taking the position that "Wong et al. teaches a time

lapse between the immediately preceding reception of the control signal exceeds a predetermined length” (see Office Action, page 3, lines 19-20).

The Applicants respectfully disagree. Wong merely discloses “a control signal transmitted from a base station antenna array to subscribers in a cell. The signal is transmitted for only a short time interval in a specified directional beam. After a predetermined sweep cycle period, the control signal beam is then retransmitted again in the same direction.” (see Wong, col. 3, line 62, to col. 4, line 5).

Wong always transmits a “specified directional beam,” and always performs such transmissions at predetermined cyclic time intervals, based on a “predetermined sweep cycle period” (see Wong, col. 4, lines 3-4). Wong fails to teach judging the length of the “time lapse between the immediately preceding reception and the transmission of the control signal,” and judging if the time lapse “exceeds a predetermined length.” Wong fails to disclose or suggest any manner of monitoring the length of the time lapse. Wong further fails to disclose taking any action if the time lapse exceeds a predetermined length.

Additionally, claim 15 recites that, when the judging unit judges both conditions are satisfied, the control unit forces the wireless base station to “stop forming the array antenna pattern,” and to “transmit the control signal by forming an omnidirectional antenna pattern.” In contrast, Wong teaches a “specified directional beam,” (see Wong, col. 4, lines 3-4), but fails to teach an omnidirectional antenna pattern.

The Office Action cites Akihiro as teaching a wireless base station that transmits a control signal to a nonspecific mobile station by forming an omnidirectional antenna pattern, and transmits a control signal to a specific mobile station by forming an array

antenna pattern (see Office Action, numbered paragraph 3). However, the combination of Akihiro and Wong, even if possible, would still fail to disclose “a controlling unit for forcing, when the judging unit judges both conditions are satisfied, the wireless base station to stop forming the array antenna pattern and to transmit the control signal by forming an omnidirectional antenna pattern,” as set forth in claim 15.

Consequently, Wong, either alone or in combination with Akihiro and Hamabe, fails to disclose and/or suggest all the elements of claim 15. Further, Wong fails to suggest ways of modifying the references to disclose or suggest all the elements of claim 15.

Claim 17 recites in part:

...a judging step of, when the control signal is to be transmitted to the specific mobile station, judging whether both of the following conditions are satisfied: (a) a difference between received reference signals in an immediately preceding reception from a mobile station is equal to or larger than a threshold value, and (b) a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length; and

a controlling step of, when the judging unit judges both conditions are satisfied, stopping the wireless base station from forming the array antenna pattern, forcing the wireless base station to transmit the control signal by forming an omnidirectional antenna pattern, and controlling the wireless base station so that a transmission power is lowered temporarily.

Similarly to as discussed above with respect to claim 15, the cited prior art fails to disclose or suggest all the elements of claim 17. Specifically, the cited prior art fails to disclose or suggest at least “judging whether... a time lapse between the immediately preceding reception and the transmission of the control signal exceeds a predetermined length,” and “when the judging unit judges both conditions are satisfied, stopping the

wireless base station from forming the array antenna pattern, forcing the wireless base station to transmit the control signal by forming an omnidirectional antenna pattern.” As set forth in the arguments above, Wong, neither alone nor in combination with Akihiro and Hamabe, fails to disclose or suggest at least this element of claim 17.

To establish *prima facie* obviousness, each feature of a rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. §2143.03 and In re Royka, 490 F.2d 981 (C.C.P.A. 1974). For at least the reasons outlined above, Wong, Akihiro, and Hamabe, alone or in combination, do not teach or suggest all the features of claims 15 and 17.

Accordingly, the Applicant respectfully submits that independent claims 15 and 17 are not rendered obvious under 35 U.S.C. § 103 by the teachings of Wong, Akihiro, and Hamabe, and therefore claims 15 and 17 are allowable over the cited prior art.

As claim 15 is allowable, the Applicant respectfully submits that claims 11, 12, and 16, which depend from independent claim 15, are allowable for at least the same reasons claim 15 is allowable, as well as for the additional subject matter recited therein.

Under U.S. patent practice, the PTO has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the U.S. Patent and Trademark Office itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under 35 U.S.C. §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The U.S. Patent and

Trademark Office can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure. Further, no specific motivation is stated by the Office Action for combining Wong, Akihiro, and Hamabe.

Thus, Applicants respectfully request withdrawal of the rejection.

Conclusion

The Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, the Applicant respectfully requests that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. The Commissioner is authorized to charge payment for any additional fees which may be required with respect to this paper to our Deposit Account No. 01-2300, making reference to Attorney Docket Number 101201-00009.

Respectfully submitted,

ARENT FOX PLLC

A handwritten signature in black ink, appearing to read 'Charles M. Marmelstein', is written over a horizontal line.

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